

## reface

It's our great honor that you choose Elitech Plasma Air Sterilizer (here in after called Sterilizer). Please read this Manual before handle the Sterilizer. Please strictly follow instructions in this Manual for installation, operation and maintenance of the Sterilizer.

This Manual is an essential part of the Sterilizer. Please keep it properly.

Please read all the information in this Manual before operate the sterilizer. Information in this Manual will help you on a quick understanding of how to operate the Sterilizer.

All contents including figures and pictures are not allowed for other use without written consent of Sinko.

Only engineers properly trained and authorized by Sinko is allowed work on installation, maintenance and troubleshooting of the Sterilizer.

If this Manual is lost, please contact us for another copy immediately. This Manual is compiled according to regular medical product.

As the sterilizer is being updated, any Inappropriate please call or email us.

As the sterilizer is being updated, Sinko reserves the rights of modification of technical parameters and the Manual itself.

CONTROLLED COPY

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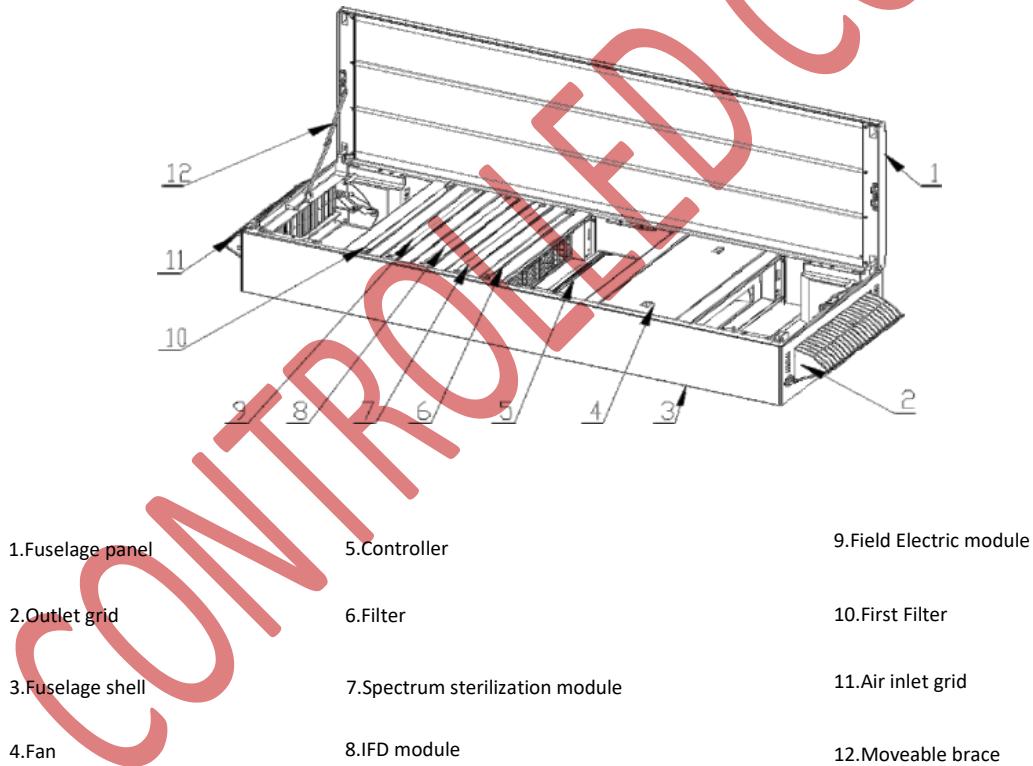
## 1. Structure

The full name of this product is Elitech Plasma Air Sterilizer KJF-B100, here after is referred to as the Air Sterilizer.

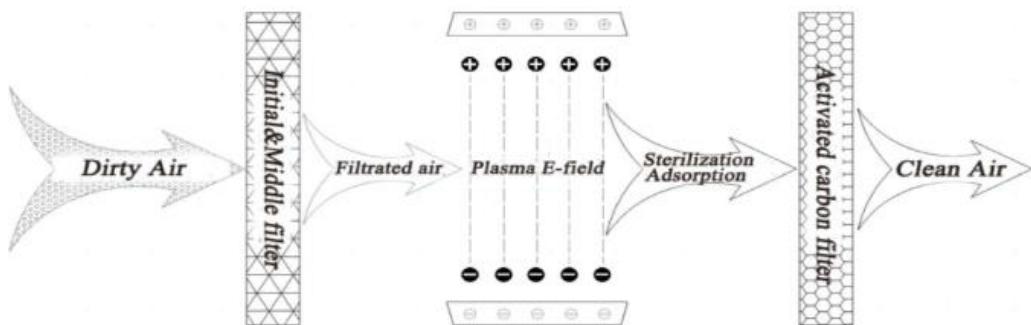
The Air Sterilizer adopts plasma air disinfection technology with the advantages of low power consumption, high efficacy of dissolution and degradation, no pollution and long life span. Plasma technology used in the Sterilizer is with special design to enhance the efficiency and efficacy and in the meantime, avoid drawback of regular plasma technology and ESP de-dusting technology. Most consumables such as UV lamps, HEPA filters are removed from the Sterilizer to cut the running cost down, while the purification and disinfection efficacy are better than traditional UV air purifiers.

### 1.1 Structure

The Sterilizer is composed of filtration system, plasma generator, electrode assembly, circulating fan, screen, controller, covers, etc. See 1-1



## 1.2 Work principle



### Description

Under the effect of low noise circulating fan, dirty indoor air inhaled in the Sterilizer and firstly passes initial & middle filters, which filtrates large particles such as hairs. Then the filtrated air goes to the plasma sterilization zone and ionized by strong electromagnetic field and transform into plasma. High energy electrons and radicals in plasma effectively kill microorganisms, degrade the hazardoussubstances and also absorb small particles in air. Finally activated carbon filter adsorbs and filtrate smell and microorganism residues in the air. After few circulating process, indoor air becomes clean and fresh.

## 2. Functions & Features

### 1. Disinfection and features

#### a. Disinfection Efficacy

The Sterilizer works continuously at its highest airspeed in an hour in a 100 m<sup>3</sup> room can kill ≥90% airborne microorganism.

#### b. Purification Efficacy

The Sterilizer works continuously for two hours can help a 100 m<sup>3</sup> room of class 1,000,000 room to reach class 100,000, effectively removes particles of ≥0.5μm.

#### c. Remove Smokes And Odors

The Sterilizer works continuously for two hours in a room of 100 m<sup>3</sup> can remove ≥99% PM2.5, and ≥95% average removing rate of formaldehyde, benzene, TVOC, ammonia.

#### d. Dynamic Working

The Sterilizer can work together with people without any protection measures. It also doesn't generate hazardous secondary substances to people.

#### e. Three Sterilization Cycles

Manual, Timer and Auto. Manual mode, timing mode, users can choose switch according to the actual use. Manual mode: manual start / stop purification through infrared remote control or mobile phone APP. Timing mode: according to the time set to start and stop disinfection, infrared remote controller can set three timing time, APP can set a variety of time and different combinations;

#### f. Easy Operation

Far infrared remote control operation and APP (support Android and IOS) operation.

Wind speed adjustment: infrared remote control and mobile phone APP settings. Temperature and humidity monitoring: users can check the indoor real-time temperature and humidity by mobile phone APP and panel display. Data check: the remaining time of disinfection and purification shows that the cumulative time query and fault alarm.

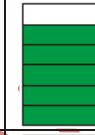
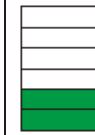
g. Remote control:

Devices support WiFi connections to local area networks; and they support connecting to servers via mobile phones to control devices. Note:

- i. This function requires a stable LAN;
- ii. Devices need to be covered by WiFi signals. Connect to the network; (group or public users need to assign specific personnel to operate).

h. Environmental monitoring function (Accessory unless specified). PM2.5/TVOC/temperature / humidity / testing (standard) The indoor PM2.5 concentration was detected dynamically. Users can view the current data of PM2.5 through the panel display screen or mobile APP, and the historical data of PM2.5 through mobile APP. PM2.5 air quality reference table of different concentrations 2-1 Aldehyde detection (optional)

Check indoor formaldehyde concentration. Reference table 2-2.

AQI content	AQI Class	Color	Czone Average in 1hour	PM2.5 Average in 24Hours	Effect	Recommended measure
0~50	Excellent		0 ~ 0.16	0 ~ 35	Basically no air pollution.	Crowd can active normally
51~100	Good		0.161~0.2	36 ~ 75	Air quality is acceptable, but some pollutants may have a weak effect on the health for very few sensitive people.	Leave or start the sterilizer
101~150	Slightly polluted		0.201~0.3	76 ~ 115	Symptoms of the susceptible population were slightly aggravated, and irritation symptoms appeared in healthy people.	Start the sterilizer
151~200	middle level pollution		0.301~0.4	116 ~ 150	May affect the heart and respiratory system of healthy people.	Start the sterilizer
201~300	heavy pollution		0.401~0.8	151 ~ 250	Symptoms of heart disease and lung disease increase significantly, exercise tolerance decreases, and symptoms generally appear in healthy people.	Start the sterilizer
> 300	severe pollution		0.801~1	251 ~ 350	Exercise tolerance of healthy people decreased, with obvious strong symptoms. Early onset of certain diseases	Start the sterilizer

Air quality sub index and corresponding pollutant concentration limits 2-1

Formaldehyde concentration	Class of pollution	Symptom
< 0.09	Fresh Air	Easy to catch cold, poor immunity, sore throat in the morning
0.09~0.3	Slightly polluted	Cough, glass easy dead inside
0.4~0.8	Heavy polluted	Asthma, Leukemia, Lung cancer
≥0.9	Extreme pollution	Asthma, easy to get leukemia, lung cancer, etc

Formaldehyde concentration level in air 2-2

### 3. Specification

Model	KJF-B100
Power Supply	AC110V ~ 240V 50/60 Hz
Power Rating	≤ 50 VA
Room (m <sup>3</sup> )	≤ 100 m <sup>3</sup>
Noise (dB)	48 dB
Plasma Density	1.8 x 10 <sup>17</sup> ~ 1.0 x 10 <sup>18</sup> m <sup>-3</sup>
Shaf Life	Overall unit 30.000 h Deck 30.000 h
Ozone Residual Quantity	<0.025 mg/m <sup>3</sup>
Installation	Wall mounting type
Dimension	900 x 340 x 160 (mm)
Net Weight	11.5 kg
Operating Ambient	Temperature : -10°C ~ 40°C Humidity : ≤90% (Non-condensate) Atmosphere : 700 hpa – 1080 hpa
Transportations and Storage	Temperature : -20 °C ~ 55 °C Humidit : ≤95% Atmosphere : 700hpa - 1080 hpa

### 4. Application Range

#### 1. Usage

The Sterilizer is designed to sterilize indoor air.

#### 2. Application Range

Applicable for various class II and III rooms, such as clinics, inpatient rooms, offices, normal OT and so on.

#### 3. Incompatible Area

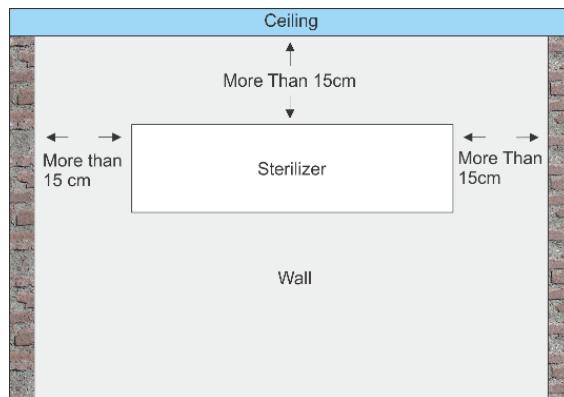
The Sterilizer cannot sterilize rooms that are with high temperature, high humidity and dust, such as bathroom, kitchen and so on.

### 5. Attention

1. Please read this manual carefully before usage
2. Regular cleaning or replacement of filters according to working environment
3. To avoid danger, non-professional personnel should not disassemble the Device.
4. Keep the Device away from fire, high humidity and severe impact.

5. Power supply socket should be a three-pin socket connected with proper grounding.
6. Check the working condition of the Device regularly and cut power off if any irregularity found. Only service engineers authorized by SINKO should work on trouble shooting.
7. Periodically check the work efficacy of the Device.
8. Please take batter out from remote if it will not be in use for a while.

## 6. Installation



6-2 Back hanging plate (Bracket)

1. Fix the wall hanging type air sterilizer with special hanging board in the proper place on the wall
2. Hang the wall hanging type air sterilizer completely on the hanging board
3. Turn on the power

Note:

All screws should be connected with additional anti-skid devices, such as spring gaskets, twin nuts, and so on, and ensure tightening, ensure installation safety. Please complete the above installation process statement under the guidance of professionals

Statement:

1. Purifier installation standards should comply with our company's "Instructions for Use" 6.0 installation method or authorized technical personnel to install
2. Private installation does not meet our company's "Instructions for Use" 6.0 installation method requirements caused by equipment falling. Our company is not responsible for any casualties or property losses.

## 7. Operating Guide

### 7.1 Screen



The contents of the panel display include:

AQI air quality: the higher the green grid, the higher the AQI index, the better the air quality.

PM2.5 concentration: Display current indoor PM2.5 concentration.

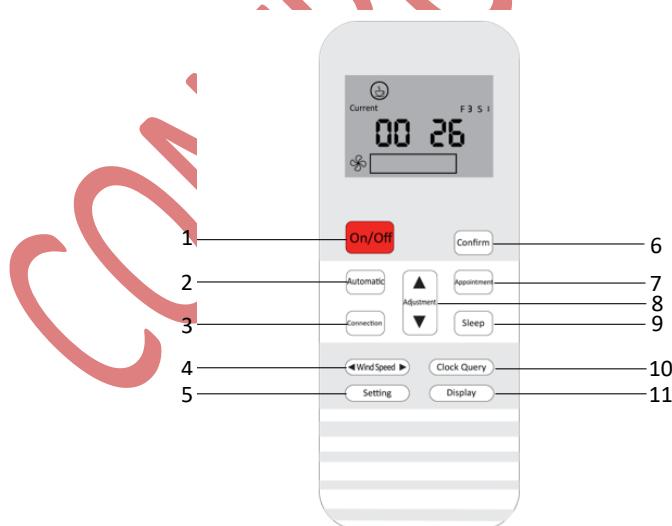
Range : 0-999 g/m

Sensor : according to the product's own rotation of sensors display;

Purification : Display manual, automatic, appointment purification mode.

Fan condition : the icon will be faster or slower as per the fan speed.

### 7.2 Telecontroller



#### Functional description

1. Button to enable and disable sterilization.
2. Button to activate Auto mode.
3. Button for connection with network (Specific Model).
4. Button to adjust fan speed.

5. Button for Setting (Specific Model).
6. Button to confirm setting changes (Specific Model).
7. Button to activate Reservation mode.
8. Press ^ is used for WiFi network (See on page 13 setting up WiFi network).
9. Button to activate Sleep mode.
10. Button to set the Timer (Specific Model).
11. Buttons to show and hide the display on the unit.

Note:

Life span of the battery for remote is varied by frequency of using. When the remote is found not working, please renew the battery. Point the remote toward the Sterilizer during using.

### 7.3. Operating guide

1. Standby  
Indicate the Sterilizer is powered on but is not working at any program
2. Turn on  
Press "switch" on controller when the Sterilizer is at standby to turn on the device.
3. The sensor and screen work normally, but purifier not work. Purofier will be standby,pressing "switch" when it's at standby. When it's on, press "Switch" to start purify, screen shows the total working time. Press "Switch" again to stop purifying
4. Timer  
Press **1h 2h 3h** to start purify and countdown will be showed. "00 : 00 : 00" the device will be standby.
5. Adjust the wind speed  
Press  to up or down the speed

Note:

When the central air conditioner is working (refrigeration, heating, ventilation, dehumidification, etc.), the purifier does not respond to adjust wind speed

## 8. APP Instruction

### 8.1 Air Purifier Cloud APP Download



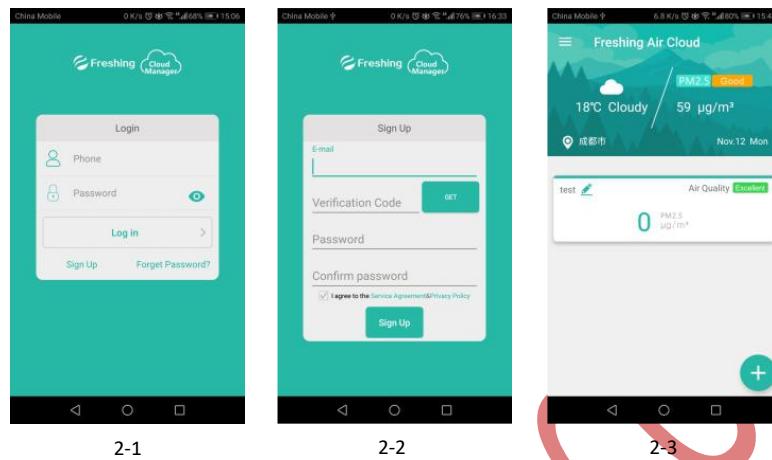
Android App Download

Download and install it, press the icon to enter into the APP.

### 8.2 Registration and Log in

1. Press "Registration", shown as 2-1
2. Input phone number and press "Send Verification Code"
3. Input the verification code, password, and confirm password
4. After reading and accepting the service agreement and privacy policy, click the registration button.
5. After registration, back to log in
6. Input phone number

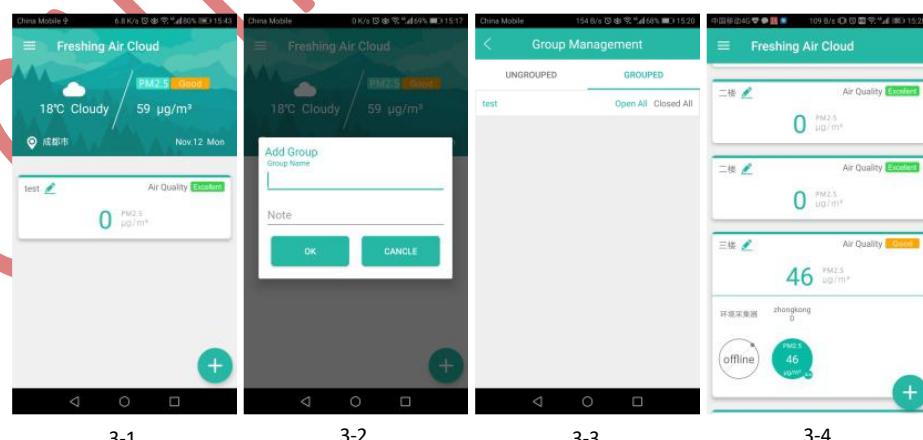
7. Input password
8. Press "Log in"
9. Log in Homepage
10. Showing City and PM2.5、temperature and weather above homepage
11. Showing groups under homepage.



### 8.3 Group management

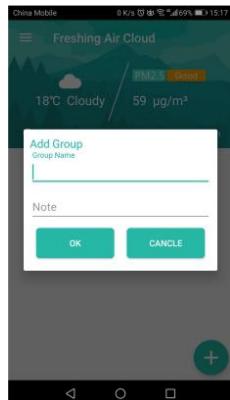
#### (1) Create group

1. Log in and enter into the homepage, showing the group, see 3-1
2. Press "+" to create new group ,see 3-2
3. Input name,mark and press "Confirm"
4. See 3-3, new group created
5. Press group to display the device list,press again to hide.Default concealment the device.
6. There is an "ungroup" , which is the default group of the system, not editable, hidden while there is no device and showing when there is a device.



(2) Amend the group name 

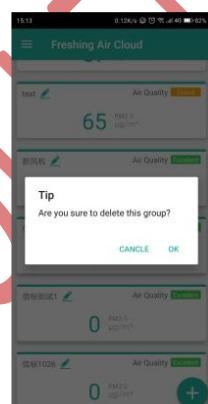
1. Press the group name or the right



4-1

## (3) Delete group

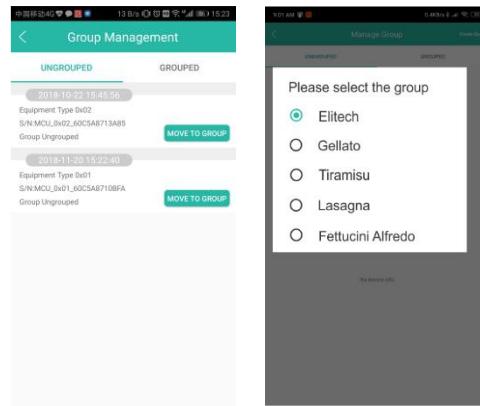
1. Press seconds on the group tp delete the group
2. Unbind the device and the group could be deleted
3. "Ungroup"can not be deleted
4. Ungrouped device move to one group



5-1

## (4) Ungrouped device move to one group

1. Press "Group Management"to enter in to the page. See 6-1
2. Press"Ungroup"to check all ungrouped devices.
3. Press"Move to Group"to move it



6-1

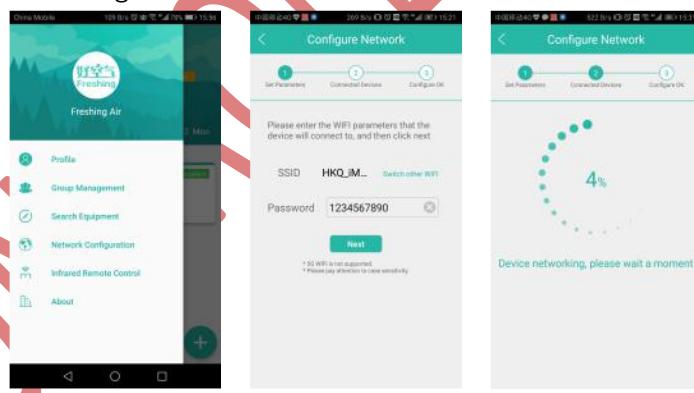
6-2

#### 8.4 Bind and unbind the devices

Note: When configuring the network, the mobile phone and device must be connected with same network, and the WiFi frequency must be 2.4 G.

##### (1) Network configuration

1. Press ^ 5 times to F enter into network configuration, colon won't twinkle then.
2. Press "Homepage" or right slide to show the Menu
3. Enter into network configuration, see 7-2
4. Input the WIFI password and link with same WIFI as phone, see 7-3
5. Colon start to twinkle while link successfully
6. May no device be found since poor network, press V 3 time to stop and press ^ 5 times to start link again when network is better.



7-1

7-2

7-3

##### (2) One key to configure

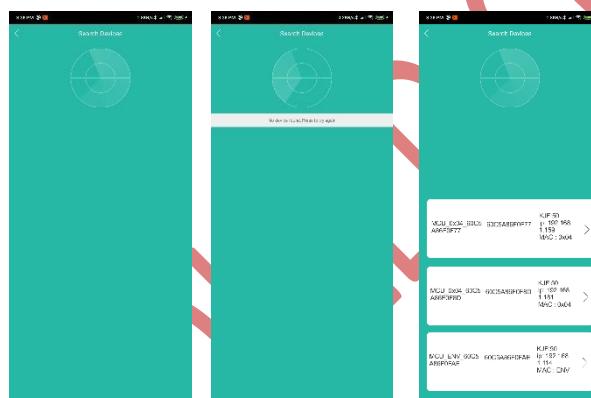
1. Linked with WIFI, press "Bind with device" to bind
2. WIFI light on the panel will be light all the time after bind
3. Press "Move to group" to move the device to one group
4. If no group is selected, the device is displayed in the "Ungroup".



8-1

### (3) Search device

1. Click "Search device" in menu, see 9-1
2. Enter into "Search device" start to search device, if no device will show a note
3. New device founded
4. Search for new device to bind

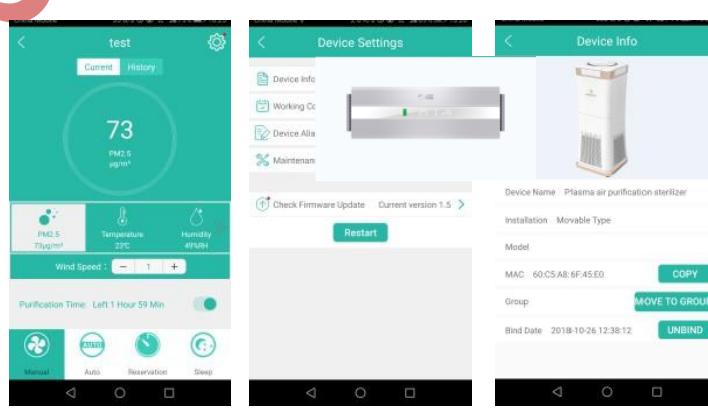


9-2

9-3

### (4) Unbind

1. Press the device under group
2. Press setting icon, see 10-2.
3. Press "Device information", see 10-3
4. Press "Unbind".



10-1

10-2

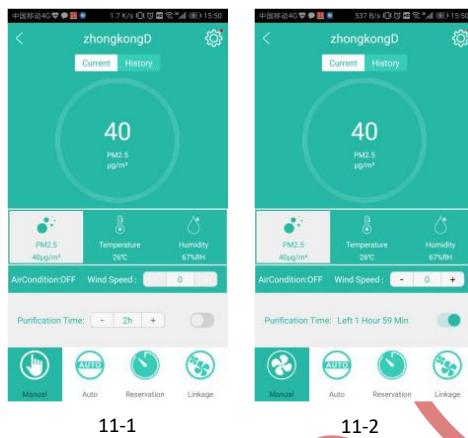
10-3

Note: Device must be unbind before delivery to other users since it could be binned with only one account.

## 8.5 Guide of device control

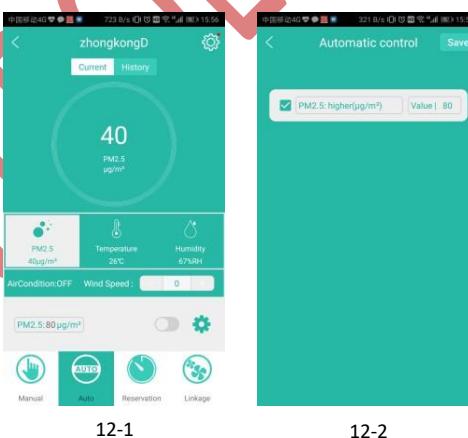
### (1) Manual

1. Enter into the device control page , see 11-1
2. Choose manual purify
3. Press"Switch"to ON/OFF
4. Start to purify and show count down time



### (2) Auto purify

1. Enter into device control page,choose Auto Purify
2. Press "Switch" turn ON/OFF auto.
3. Press "Setting"under "Auto purify"to set threshold
4. Press"Save"to keep the amendment

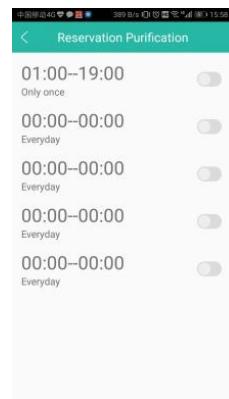


### (3) Timer

1. Enter into device control page,choose reservation purify,see 13-1
2. Press "Switch" turn ON/OFF auto.
3. Press" setting" under reservation, set time see 13-2
4. Press any time set before and adjust, see 13-3



13-1



13-2



13-3

## (4) Restart

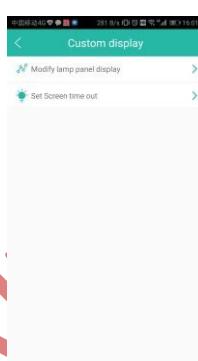
Press "Restart" in page

## (5) Adjust gear

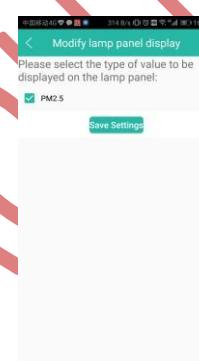
Click "+" and "-" button to adjust the wind speed under "Device control" page

## (6) Customize Display

1. Enter into "Device control" page (See 16-1), click "Customize Display"
2. Click "Amend Lamp Panel Display", see 16-2
3. Set blank screen time. See 16-3



16-1



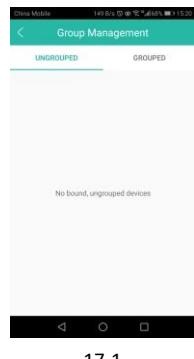
16-2



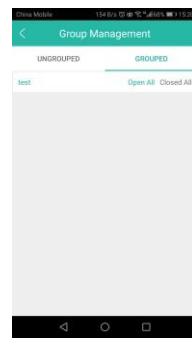
16-3

## (7) Job-lot control

1. Press "Group management", see 17-1
2. Press "Group", check the group list, see 17-2
3. Press "All ON"(2HOURS) or "ALL OFF" to control the whole devices in one group



17-1



17-2

### (8) Real time data and historical curves

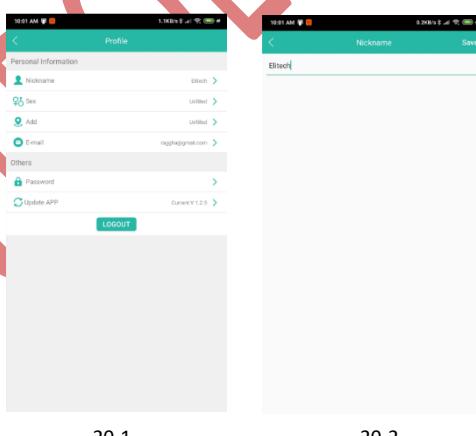
1. Real-time data display as shown in 18-1, by clicking below PM2.5, Temperature, Humidity and to switching over the real-time data display or history curve;
2. Press "Current" or "History" to switch, see 18-1
3. By clicking the PM2.5, Temperature, humidity and so on, toggle the upper historical data
4. Slide the history to display the data in last 7 days



### 8.6 Amend User Information

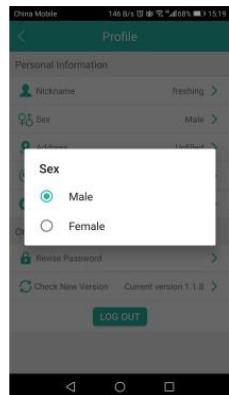
#### (1) Amend user name

1. Press "Personal Center", see 20-1
2. Press "User Name", see 20-2
3. Press "Save" to remain the settings



#### (2) Amend gender

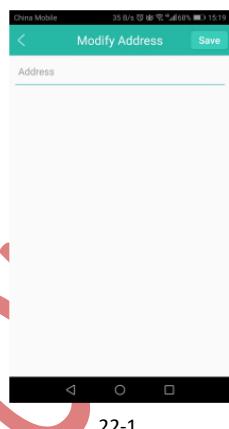
1. Press "Personal Center", see 21-1
2. 21-1. Press "Gender" to choose, see 21-1



21-1

## (3) Amend address

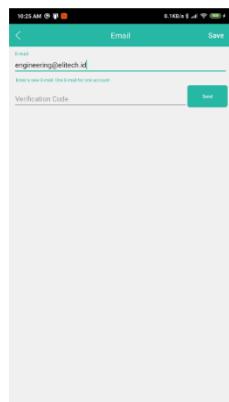
1. Press "Personal Center", see 22-1
2. Press "Address Amendment" to amend, see 22-1
3. Press "Save" to remain the Settings.



22-1

## (4) Amend Email address

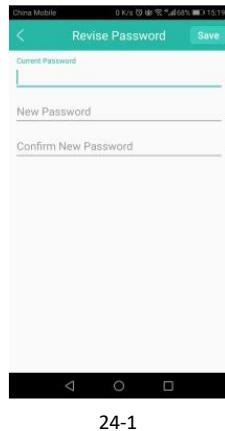
1. Press "PersonalCenter", see 23-1
2. Press "Email Amendment", see 23-1
3. Press "Save" to remain the settings



23-1

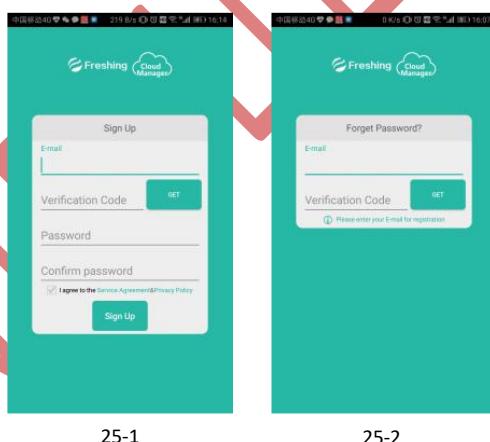
## (5) Amend &amp; Retrieve Password

1. Press "Personal Center", see 25-1
2. Press "Password Amendment", see 21-1
3. Input the new & old password, Press "Save" to remain the settings



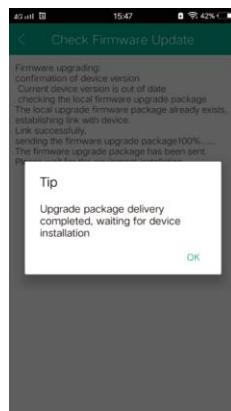
## (6) Retrieve Password

1. Press "Retrieve Password", see 26-1
2. Input registration phone number to get verification code
3. Input new password and save

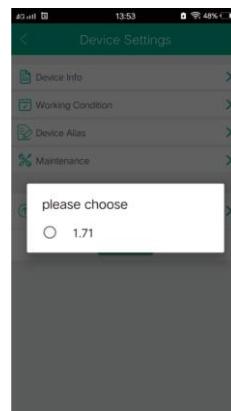
**8.7 Firmware update**

## (1) Firmware update

1. Press "Firmware update" in ""Setting" page, check new version, see 27-1
2. Press "Update now", see 27-1
3. Note: Device and phone need to connect with same WIFI when update.



26-1



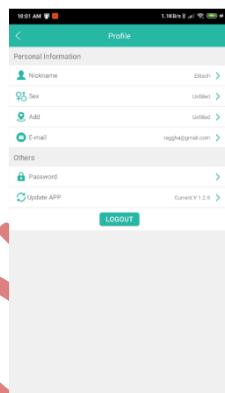
26-2



26-3

## (2) APP Update

1. Press "Personal Center", see 28-1
2. Press "Check Update", display note if there is
3. Press "Update" to download and install it



27-2

## 9. Maintenance

1. Disconnect the power and wipe clean the Sterilizer with soft cloth. Put a little alcohol on the cloth if necessary. Do Not let liquid goes into the Sterilizer.
2. Disconnect the power and wipe clean the Sterilizer with soft cloth. Put a little alcohol on the cloth if necessary. Do Not let liquid goes into the Sterilizer.

## 10. Waste Disposal

1. The Sterilizer should be disposed according to local regulations of solid medical waste.
2. Batteries should be disposed properly as per related regulations.

## 11. Troubleshooting

Error Code	Problem
E1	Filter out of date
E2	Deck out of date
E3	Spectrum sterilizer abnormal
E4	Negative ion anomaly
E5	Sensor not detected
E6	No filter detected
E7	No deck detected
E8	Motor anomaly
E9	Hyperpyrexia
E12	Spectrum sterilizer and Negative ion anom

No	Item	Probable Cause	Troubleshooting
1	Device not work	No power	Check supply voltage if AC110 ~ 220V 50/60Hz
		No Power	Power line connect tight
		Device Broken	Contact with after sales department
2	Temperature and humidity anomaly	Temperature ≥60°C	Contact with after sales department
		Humidity ≥90%	Back to normal with lower temperature
3	Disinfection and dust removal is poor	Purify time is short	And humidity
		Too big space	Check the areas
		Filter invalid	Change filter
4	Full stink	Seive invalid	Change seive
5	Remote control not work	Low Battery interference of light and	Change battery
		Electromagnetic equipment	Use it close
		Gap between	Clear obstacles

### Note:

- For any problem not mentioned above, please contact Freshingair after sales department.
- Disconnect power supply before maintenance.
- Serious problem of the Sterilizer should be fixed by authorized engineers to avoid damages of the Sterilizer or injuries

## 12. Explanation of Symbols

1		Type B Applied Part
2		Class II
3		Operation Instructions
4		Switch ON/OFF
5		Refer to Manual Book
6		High Voltage, AC 110 ~ 220 V
7		Warning
8		Serial Number
9		Manufacturer
10		Do Not Dispose
11		Keep Dry
12		Handle With Care
13		Fragile
14		Side Up

## 13. Warranty and Service

From the date you buy our products, we shall provide you our excellent after-sales service , ensure you use these devices easily

- Three guarantees
  1. We provide you three guarantees in 1 year from delivery
  2. It is forbidden for any office, direct selling office or middleman to collect maintenance fees, spare parts replacement fees and travel expenses during the period of "Three Guarantees". You are requested to SU.
- Life-long maintenance
 

Maintenance service will be charged.
- Free instruction
 

The company and its provincial offices, the general agent will provide you with free consultation, free door-to-door training, lectures and other related information in the use of our products to achieve the best usage.
- Other notes
 

If you have purchased our products in the intermediate supplier, we hope you can contact us directly,so that we can file for regular after-sales service.

Note: This after-sales service principle is only limited to the plasma air Sterilizer produced by our company